

FORM PTO-1390 (Modified) U.S. PATENT AND TRADEMARK OFFICE; U.S. DEPARTMENT OF COMMERCE  
(REV. 07-2004)

ATTORNEY'S DOCKET NUMBER

TRANSMITTAL LETTER TO THE UNITED STATES  
DESIGNATED/ELECTED OFFICE (DO/EO/US)  
CONCERNING A SUBMISSION UNDER 35 U.S.C. 371

2002DE305

U.S. APPLICATION NO. (If known, see 37 CFR 1.5)

NOT ASSIGNED 10/511402

INTERNATIONAL APPLICATION NO.  
PCT/EP03/03666INTERNATIONAL FILING DATE  
April 9, 2003PRIORITY DATE CLAIMED  
April 17, 2002

TITLE OF INVENTION

NANOIMPRINT RESIST

APPLICANT(S) FOR DO/EO/US

Walter SPIESS, Fumio KITA, Michael MEIER, Andreas GIER,  
Martin MENNIG, Peter W. OLIVEIRA, Helmut SCHMIDT

Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

1. ☒ This is a **FIRST** submission of items concerning a submission under 35 U.S.C. 371.
2. ☐ This is a **SECOND** or **SUBSEQUENT** submission of items concerning a submission under 35 U.S.C. 371.
3. ☒ This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (24) indicated below.
4. ☒ The US has been elected (Article 31).
5. ☒ A copy of the International Application as filed (35 U.S.C. 371 (c) (2))
  - a. ☐ is attached hereto (required only if not communicated by the International Bureau).
  - b. ☒ has been communicated by the International Bureau.
  - c. ☐ is not required, as the application was filed in the United States Receiving Office (RO/US).
6. ☒ An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)).
  - a. ☒ is attached hereto.
  - b. ☐ has been previously submitted under 35 U.S.C. 154(d)(4).
7. ☒ Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371 (c)(3))
  - a. ☐ are attached hereto (required only if not communicated by the International Bureau).
  - b. ☒ have been communicated by the International Bureau.
  - c. ☐ have not been made; however, the time limit for making such amendments has NOT expired.
  - d. ☐ have not been made and will not be made.
8. ☒ An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).
9. ☐ An oath or declaration of the inventor(s) (35 U.S.C. 371 (c)(4)).
10. ☐ An English language translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371 (c)(5)).
11. ☐ A copy of the International Preliminary Examination Report (PCT/IPEA/409).
12. ☒ A copy of the International Search Report (PCT/ISA/210).

## Items 13 to 23 below concern document(s) or information included:

13. ☐ An Information Disclosure Statement under 37 CFR 1.97 and 1.98.
14. ☐ An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.
15. ☒ A **FIRST** preliminary amendment.
16. ☐ A **SECOND** or **SUBSEQUENT** preliminary amendment.
17. ☐ A substitute specification.
18. ☐ A power of attorney and/or change of address letter.
19. ☐ A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821 - 1.825.
20. ☐ A second copy of the published International Application under 35 U.S.C. 154(d)(4).
21. ☐ A second copy of the English language translation of the International Application under 35 U.S.C. 154(d)(4).
22. ☒ Express Mail Label No. EL 972143618 US
23. ☒ Other items or information:

Form PCT/IPEA/416

Form PCT/IPEA/409

Form PCT/ISA/210

WO 03/087935 A2

U.S. APPLICATION NO (if known, see 37 CFR 1.51) <b>NOT ASSIGNED</b>		INTERNATIONAL APPLICATION NO. <b>PCT/EP03/03666</b>		ATTORNEY'S DOCKET NUMBER <b>2002DE305</b>	
24. The following fees are submitted: <b>BASIC NATIONAL FEE (37 CFR 1.492(a)(1)-(5)) :</b> <input type="checkbox"/> Neither international preliminary examination fee (37 CFR 1.482) nor international search fee (37 CFR 1.445(a)(2)) paid to USPTO and International Search Report not prepared by the EPO or JPO ..... <b>\$1110.00</b> <input checked="" type="checkbox"/> International preliminary examination fee (37 CFR 1.482) not paid to USPTO but International Search Report prepared by the EPO or JPO ..... <b>\$950.00</b> <input type="checkbox"/> International preliminary examination fee (37 CFR 1.482) not paid to USPTO but international search fee (37 CFR 1.445(a)(2)) paid to USPTO ..... <b>\$790.00</b> <input type="checkbox"/> International preliminary examination fee (37 CFR 1.482) paid to USPTO but all claims did not satisfy provisions of PCT Article 33(1)-(4) ..... <b>\$750.00</b> <input type="checkbox"/> International preliminary examination fee (37 CFR 1.482) paid to USPTO and all claims satisfied provisions of PCT Article 33(1)-(4) ..... <b>\$100.00</b> <b>ENTER APPROPRIATE BASIC FEE AMOUNT =</b> <b>\$950.00</b>				<b>CALCULATIONS PTO USE ONLY</b>	
Surcharge of <b>\$130.00</b> for furnishing the oath or declaration later than <input type="checkbox"/> 20 <input type="checkbox"/> 30 months from the earliest claimed priority date (37 CFR 1.492(e)).				<b>\$0.00</b>	
CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE		
Total claims	14 - 20 =	0	x \$18.00	<b>\$0.00</b>	
Independent claims	1 - 3 =	0	x \$88.00	<b>\$0.00</b>	
Multiple Dependent Claims (check if applicable) <input type="checkbox"/>				<b>\$0.00</b>	
<b>TOTAL OF ABOVE CALCULATIONS =</b>				<b>\$950.00</b>	
<input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. The fees indicated above are reduced by 1/2.				<b>\$0.00</b>	
<b>SUBTOTAL =</b>				<b>\$950.00</b>	
Processing fee of <b>\$130.00</b> for furnishing the English translation later than <input type="checkbox"/> 20 <input type="checkbox"/> 30 months from the earliest claimed priority date (37 CFR 1.492(f)).				<b>\$0.00</b>	
<b>TOTAL NATIONAL FEE =</b>				<b>\$950.00</b>	
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31) (check if applicable) <input type="checkbox"/>				<b>\$0.00</b>	
<b>TOTAL FEES ENCLOSED =</b>				<b>\$950.00</b>	
				Amount to be:	\$
				refunded	\$
				charged	\$

- a. ☐ A check in the amount of \_\_\_\_\_ to cover the above fees is enclosed.
- b. ☒ Please charge my Deposit Account No. 03-2060 in the amount of \$950.00 to cover the above fees.
- c. ☒ The Director is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 03-2060
- d. ☐ Fees are to be charged to a credit card. **WARNING:** Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

**NOTE:** Where an appropriate time limit under 37 CFR 1.494 or 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the International Application to pending status.

SEND ALL CORRESPONDENCE TO:

ALAN P. KASS  
 AZ ELECTRONIC MATERIALS USA CORP.  
 70 MEISTER AVENUE  
 SOMERVILLE, NJ 08876

CUSTOMER NO. 26,289

SIGNATURE

ALAN P. KASS

NAME

32,142

REGISTRATION NUMBER

October 13, 2004

DATE

10/511402

T05 Rec'd PCT/PTO 13 OCT 2004

**CERTIFICATE OF MAILING BY "EXPRESS MAIL" (37 CFR 1.10)**Applicant(s): **Walter SPIESS et al.**

Docket No.

**2002DE305**Application No.  
**NOT ASSIGNED**Filing Date  
**October 12, 2004**Examiner  
**NOT ASSIGNED**Customer No.  
**26,289**Group Art Unit  
**NOT ASSIGNED**

Invention:

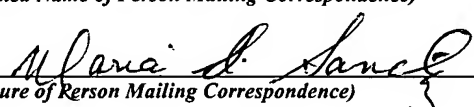
**NANOIMPRINT RESIST**

I hereby certify that the following correspondence:

**Transmittal Letter - 2 Pages***(Identify type of correspondence)*

is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on

October 13, 2004*(Date)*MARIA T. SANCHEZ*(Typed or Printed Name of Person Mailing Correspondence)*  
*(Signature of Person Mailing Correspondence)*EL 972143618 US*("Express Mail" Mailing Label Number)***Note: Each paper must have its own certificate of mailing.**

<b>CERTIFICATE OF MAILING BY "EXPRESS MAIL" (37 CFR 1.10)</b>			Docket No. 2002DE305	
Applicant(s): Walter SPIESS et al.				
Application No. NOT ASSIGNED	Filing Date October 12, 2004	Examiner NOT ASSIGNED	Customer No. 26,289	Group Art Unit NOT ASSIGNED
Invention:  NANOIMPRINT RESIST				
I hereby certify that the following correspondence:  <div style="border: 1px solid black; padding: 10px; text-align: center;">English language translation of the amendments to the claims under PCT Article 19 (U.S.C. 371(c)(3)) - 3 Pages</div> <i>(Identify type of correspondence)</i>  is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on  <div style="text-align: center;"><u>October 13, 2004</u> <i>(Date)</i></div> <div style="text-align: center;"><u>MARIA T. SANCHEZ</u> <i>(Typed or Printed Name of Person Mailing Correspondence)</i>   <i>(Signature of Person Mailing Correspondence)</i></div> <div style="text-align: center;"><u>EL 972143618 US</u> <i>("Express Mail" Mailing Label Number)</i></div>				
<p style="text-align: center;"><b>Note: Each paper must have its own certificate of mailing.</b></p>				

10/511402

D105 PCT/PTO 13 OCT 2004

**CERTIFICATE OF MAILING BY "EXPRESS MAIL" (37 CFR 1.10)**

Applicant(s): Walter SPIESS et al.

Docket No.

2002DE305

Application No. NOT ASSIGNED	Filing Date October 12, 2004	Examiner NOT ASSIGNED	Customer No. 26,289	Group Art Unit NOT ASSIGNED
---------------------------------	---------------------------------	--------------------------	------------------------	--------------------------------

Invention:

NANOIMPRINT RESIST

I hereby certify that the following correspondence:

WO 03/087935 A2 - 20 Pages

*(Identify type of correspondence)*

is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on

October 13, 2004*(Date)*MARIA T. SANCHEZ*(Typed or Printed Name of Person Mailing Correspondence)**(Signature of Person Mailing Correspondence)*EL 972143618 US*("Express Mail" Mailing Label Number)***Note: Each paper must have its own certificate of mailing.**

10/511402

05 Rec'd PCT/PTO 13 OCT 2004

**CERTIFICATE OF MAILING BY "EXPRESS MAIL" (37 CFR 1.10)**Applicant(s): **Walter SPIESS et al.**

Docket No.

2002DE305

Application No.  
**NOT ASSIGNED**Filing Date  
**October 12, 2004**Examiner  
**NOT ASSIGNED**Customer No.  
**26,289**Group Art Unit  
**NOT ASSIGNED**

Invention:

**NANOIMPRINT RESIST**

I hereby certify that the following correspondence:

**Form PCT/IPEA/409 - 8 Pages***(Identify type of correspondence)*

is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on

October 13, 2004*(Date)*MARIA T. SANCHEZ*(Typed or Printed Name of Person Mailing Correspondence)**(Signature of Person Mailing Correspondence)*EL 972143618 US*("Express Mail" Mailing Label Number)***Note: Each paper must have its own certificate of mailing.**

<b>CERTIFICATE OF MAILING BY "EXPRESS MAIL" (37 CFR 1.10)</b> Applicant(s): <b>Walter SPIESS et al.</b>			Docket No. <b>2002DE305</b>	
Application No. <b>NOT ASSIGNED</b>	Filing Date <b>October 12, 2004</b>	Examiner <b>NOT ASSIGNED</b>	Customer No. <b>26,289</b>	Group Art Unit <b>NOT ASSIGNED</b>

Invention:

**NANOIMPRINT RESIST**

I hereby certify that the following correspondence:

**Form PCT/IPEA/416 - 1 Page**

*(Identify type of correspondence)*


is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on

October 13, 2004

*(Date)*

**MARIA T. SANCHEZ**

*(Typed or Printed Name of Person Mailing Correspondence)*



*(Signature of Person Mailing Correspondence)*

**EL 972143618 US**

*("Express Mail" Mailing Label Number)*

**Note: Each paper must have its own certificate of mailing.**

10/511402

2005 Rec'd PCT/PTO - 13 OCT 2004

**CERTIFICATE OF MAILING BY "EXPRESS MAIL" (37 CFR 1.10)**

Applicant(s): Walter SPIESS et al.

Docket No.

2002DE305

Application No. NOT ASSIGNED	Filing Date October 12, 2004	Examiner NOT ASSIGNED	Customer No. 26,289	Group Art Unit NOT ASSIGNED
---------------------------------	---------------------------------	--------------------------	------------------------	--------------------------------

Invention:

NANOIMPRINT RESIST

I hereby certify that the following correspondence:

International Search Report (Form PCT/ISA/210) - 1 Page

*(Identify type of correspondence)*

is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on

October 13, 2004*(Date)*MARIA T. SANCHEZ*(Typed or Printed Name of Person Mailing Correspondence)**(Signature of Person Mailing Correspondence)*EL 972143618 US*("Express Mail" Mailing Label Number)***Note: Each paper must have its own certificate of mailing.**